

SOCIAL MARKETING PLAN
PIPELINE SAFETY TRUST OUTREACH PROGRAM
Implementing Consultation Zones in Washington State

FINAL: September, 2010

**Pamela M. M. Jull, PhD, Applied Research Northwest
with
Carl Weimer, Pipeline Safety Trust**



**1155 North State St., Suite 609
Bellingham, Washington 98225
(360) 543-5686
www.pipelinesafetytrust.org**



APPLIED RESEARCH NORTHWEST, LLC

**1313 East Maple Street, Suite 201
Bellingham, Washington 98225
(360) 647-6067
www.arnortwest.com**

PURPOSE AND PROBLEM STATEMENT

The purpose of this program is to save lives, protect property, and to activate local public officials.

Pipeline safety is seldom arises as an issue for most planning directors in their day to day work (PST Survey, 2010). Pipeline-related incidents rarely happen and sometimes are remote enough that they don't show up on planning directors' radars. There is no system to trigger planners to consider pipelines when new development happens. Often developers and planners are not using best practices when a pipeline is involved. Planners, developers and pipeline operators don't communicate early enough when a development is near a pipeline.

The objective of this social marketing plan is to develop an effective outreach strategy that will enable planners to adopt behaviors that address this problem. The Pipeline Safety Trust convened a Steering Committee for this work. It consisted of a representative from a pipeline operator, a local planner, two local elected officials and three members of groups that work on pipeline safety education.

SITUATION ANALYSIS

Using a SWOT Analysis, the Steering Committee for this program assessed the capacity of their group to undertake this endeavor at this time as well as the advantages and challenges they might have in doing so.

Internal Strengths	Internal Weaknesses
<ul style="list-style-type: none">■ Motivation■ Time■ Connections to local government■ Draft documents in existence (PIPA Report)■ Communication venue (MRSC website)■ Citizens, operators, local and state governments already working together and stakeholders agree on need for safety	<ul style="list-style-type: none">■ Lack of strong organizational structure to implement■ Future funding (only one-year grant)■ Lack of contacts and communications with developers■ Small staff available■ Evaluation of existing programs has not been executed, planned for, or funded

External Opportunities	External Threats
<ul style="list-style-type: none"> ■ Supportive pipeline companies ■ PHMSA support ■ Local governments open to message and trusting ■ Planning association (national and local) audience is clear ■ Existing promotions from pipeline operators ■ Local governments revising comprehensive plans in response to the state Growth Management Act (some are moving ahead, though the state legislature has postponed the mandate by 3 years) ■ Federal funding is available to local governments ■ Development has slowed so there may be time for planners to implement ■ Helping local governments respond to need (i.e. ordinance development) ■ Statewide group is redrafting the One Call Statute to include incentives for communities adopting Consultation Zones ■ Federal government is looking for demonstrable effects of public awareness campaigns fielded by pipeline operators 	<ul style="list-style-type: none"> ■ Some “turf” concerns ■ Message confusion ■ Unsupportive pipeline companies ■ Misinterpretation of risk regarding pipelines ■ Not a hot issue ■ Local government staff may be understaffed for taking on work ■ Unrealistic stakeholders (especially PHMSA) about how to effectively implement

AUDIENCE

Several audiences were considered for the program. Research supported the selection of Planning Directors in cities and counties as the primary audience. Additional audiences who could become involved in solving these problems are:

- City and county planning staff members
- Local elected officials, such as city and county council members, mayors and city executives
- Property owners and developers planning excavation or building projects near pipelines
- Pipeline operators
- Residents of various municipalities

Other potential audiences for future planning include planning commissions, permit officials, legal counsel, and emergency responders. Finally, the following audiences may also benefit from engagement around the problem: neighborhood associations, realty organizations, related professional associations, other non-governmental agencies, property owners and the Building Industry Association.

BEHAVIORAL GOALS

Damage to pipelines can occur in the event of excavation or construction – for example, if heavy equipment compacts soils around pipelines or removes material that supports a pipeline. In addition, buildings planned for areas with pipelines in them could be damaged in an emergency if situated too close to a pipeline, or safety may be impeded if entrances and exits are crossed by pipelines.

The Pipeline Safety Trust is interested in improving communications early in the planning phase of a project; if excavation or new development is proposed in an area containing a pipeline, planning offices could instruct developers to contact the pipeline operator to discuss their project. Proof of the consultation between the developer and the pipeline operator could be required before any permits were issued. In some cases planners may choose to be involved in the content of those discussions to provide information on best practices to the land owner and pipeline operator.

In order to adopt this practice, local public officials will have to visit the “Planning Near Pipelines” website for information and present and discuss appropriate practices in a public venue.

The following are the barriers, incentives and competing behaviors for this target audience based on qualitative and quantitative research (reports available under separate cover).

BARRIERS

Barriers are any conditions that might make it difficult for the target audience to engage in the desired behavior. For planning directors, they include:

- Many planning directors are not aware of transmission pipelines operating through or adjacent to their jurisdictions.
- Many jurisdictions lack accurate, up-to-date maps showing where transmission pipelines are.

- Transmission pipelines may not be well marked in communities, or planners may not know what to look for to identify them.
- Issues related to pipelines and pipeline safety *rarely* or *never* occur in the day to day work of planners (according to 74% of survey respondents).
- Planners may lack understanding of best practices when planning near pipelines.
- Planning departments may have poor relationships or no relationships with pipeline operators in their areas.
- Communications protocols may be seen as ineffective.
- The size of the area triggering a communication protocol may be seen as too large or inappropriately sized for the pipeline's characteristics.
- Adoption may be seen as slowing permitting or making it more costly to land owners and developers.
- Staff may not have time to do the work to adopt the process
- Planners may lack the financial resources required to pay staff to do the work to get through the adoption process
- Property rights advocates may resist adoption if it is seen as a threat.
- Adoption may seem irrelevant if most major pipelines are outside of city or county limits or carrying low-threat substances
- Elected officials and planning commissioners may not agree that there is a need, or other mandates may take a higher priority than pipeline safety
- It requires the drafting of an ordinance which can be a daunting task.

INCENTIVES

Incentives are anything that make the behavior appealing or easy to execute. In this case they include:

- Grant funding is currently available to support the development of ordinances.
- Sample ordinances are available
- Free technical assistance is available
- Accurate and up-to-date maps are available
- This has been implemented elsewhere, so case studies are available showing a lack of permitting problems arising.
- There is a free presentation that the PST can offer to help raise awareness

COMPETING BEHAVIORS

Competing behaviors are the behaviors that have led to things being as they are now. The program can address these by creating ways to make them less appealing or more difficult to do.

- Leaving pipeline safety off the list of things that need to be done
- Supporting the status quo
- Reacting to immediate needs rather than doing preventative work

POSITIONING STATEMENT

The Pipeline Safety Trust wants planning directors, staff and elected local officials to see adopting this communication process as an easy and effective way to protect people and property when excavation or new development is proposed near pipelines and as more important and beneficial than reacting to immediate needs, supporting the status quo, and leaving pipeline safety off the list of things that need to be done.

The following belief and knowledge objectives may support the target audience in engaging in the desired behavior.

BELIEF OBJECTIVES

The following belief objectives may support the target audience engaging in the desired behavior.

- By adopting a communication process, risks can be reduced
- The area designated for communications is reasonably derived
- The process and ordinance are customized to each community's needs
- This reduces hassles for staff and developers by identifying problems before permitting is completed.
- This is a proactive approach to pipeline safety
- This does not require that specific standards are met
- It does not impact planning staff authority in the approval or veto of a project

KNOWLEDGE OBJECTIVES

The following knowledge objectives may support the target audience as well.

- There are planning options that reduce risks
- This process only requires two parties to talk

- There are appropriate recommended practices (and learn what they are)
- Where to find the recommended practices
- A clear description of the process, and some examples
- The types of activities that can impact pipelines
- Pipelines are an efficient, safe and desirable way to move fuels
- It can allow involved parties to reach solutions without government intervening
- This is not a new idea – examples of places it has been done
- A wide array of organizations support the adoption of a communication process including builders, pipeline operators and others.
- Following the model will assist local public officials with providing appropriate direction for their communities to adopt a process.
- Using this approach helps create open spaces – a desirable quality in any development

RESEARCH

Three research efforts were undertaken to inform this program:

1. Planning directors from all over Washington State were contacted by phone for in-depth interviews about Consultation Zoning and pipeline safety.
2. A statewide survey of planning directors was conducted via internet.
3. Focus groups were held to review survey findings and identify next step.

Complete research reports are available under separate cover.

MARKETING PLAN

Based on the research findings, the following items will encompass the marketing plan.

PRODUCTS

Products are tangible objects or services that aid in adopting a behavior. For this program, they may include:

- Workshops
- Brochure (how to get started)
- Checklist – best practices or considerations
- MRSC Website
- PIPA Report
- Listserv
- Federal Website (PHMSA)

- Free consulting
- Model consultation zone ordinance
- Pipeline maps
- Formula for computing communication area size for natural gas pipelines
- Formula for computing communication area size for hazardous liquids

PLACEMENT

Placement refers to the where and when of the target market receiving the program. For this program this may include:

- Regional planning workshops
- Conferences – APA, AWC, WAPA, PAW, etc.
- Mailings
- Customized “seal the deal” presentations in local jurisdictions
- Web pages with hot links to next steps and resources
- Newsletters – web and printed
- One on one discussions
- Letter to the editor and Op-ed pieces

PRICE

Pricing refers to anything that increases the cost of a competing behavior or decreases the cost of engaging in the desired behavior. It may be monetary, but can also refer to convenience.

For this program pricing may include:

- Grant funding for GIS database development
- Grant funding for ordinance development
- Case studies showing permitting timelines and fees in areas with communication areas

PROMOTION

Promotion refers to three areas of communication for the program. Who will carry the message? What will the message be? How will the message be presented (e.g. email, radio etc.)?

For this program the following promotion may be included:

Messages

Refer to the belief and knowledge objectives above, as well as the positioning statement.

Priority messages include:

- Won't delay development
- Won't increase costs
- Pipelines are in your community (raise awareness of their presence and location for planners, landowners and elected officials)
- Your pipelines' characteristics and community preferences will determine the area affected
- Know what's in your community and plan accordingly
- Protect the public and protect the pipeline
- Lessen the likelihood of rupture during and after construction

Channels

- State Department of Commerce
- MRSC/PST Newsletter, websites, workshops
- WSAC website, newsletter, conference and workshop
- AWC Website, newsletter, conference and workshop
- Letters to elected officials and planners

Messengers

These are trusted sources for information relevant to the program

- Development organizations
- Other public officials
- Other planners
- Pipeline operators – especially specific contacts within pipeline companies who will understand and vouch for the program
- Federal and State regulators (UTC)
- PIPA
- CCOPS

IMPLEMENTATION PLAN

Drafted by Carl Weimer of the Pipeline Safety Trust

Goal – Provide the promotion and incentives, while removing the barriers, so it becomes more common for local government entities in Washington State to adopt and successfully implement pipeline safety consultation zone ordinances.

Objective 1 – Provide county and city government with the education, support and technical assistance necessary that leads to the introduction of pipeline safety consultation zone ordinances in at least 10 communities within 12 months from the start of this program.

Task 1 – Develop materials that will make it easy for local government to understand and adopt consultation zones. Those materials will include at a minimum:

- Sample ordinances from communities that have already adopted consultation zones.
- The final PIPA Report that describes the need and justification for consultation zones.
- A clear description of a potential impact radius, and how local government can determine the needed consultation zone distances for the pipelines in their communities.
- A well illustrated presentation that provides the concept of consultation zones and examples of how if they are adopted they can increase safety and prevent future problems.
- Develop promotional and informational materials regarding how and where local government can receive financial support for these efforts.
- List of consultation contacts within each pipeline company.
- Create a website with all of the above and additional background information.

Task 2 – Use some of the remaining AWC grant as seed money and seek additional sources of funding to create a fund of at least \$15,000 to provide small (\$1500) implementation grants to local governments to help offset the staff costs of drafting and introducing an ordinance. These “grants” should have as few strings attached as is possible, and should be promoted on a first come first served basis to help create a sense of urgency to facilitate timely implementation.

Task 3 – Once the Final PIPA Report is released begin promotion of the concept by providing presentations at conferences and other gatherings of local government planners, administrators and elected officials to introduce the idea. Also promote availability of the information on the website.

Task 4 – To provide local citizen and media support to elected officials to pass such ordinances draft an Op Ed or Letter to the Editor for submission to local newspapers which uses recent pipeline disasters as a call for local government to be more proactive in ensuring the safety of those who live and work near pipelines.

Task 5 – In communities that have shown interest in such pipeline safety efforts send a well spoken pipeline safety expert to their council/commission meeting to speak during a committee meeting or the public session outlining the need for greater pipeline safety,

requesting action on such an ordinance, and providing information about financial assistance.

Obtaining Commitment –

- During conference presentations seek a pledge from attendees to help set up a meeting with who they see as the decision makers in their jurisdictions to get the consultation zone concept on the docket/
- During presentations to elected officials at Council/Commission meetings try to obtain an on the record verbal commitment to advancing the consultation zone concept.
- Make payment of the \$1500 implementation grant contingent on introduction of a consultation zone ordinance.

Objective 2 – Provide the pipeline safety stakeholders (pipeline industry, regulators, AWC, WSAC, CCOPS) the materials and coordination to successfully support local government adoption and implementation of consultation zones.

Task 1 – Hold at least one face-to-face meeting of the consultation contacts from each pipeline company and the stakeholders implementing the effort to ensure everyone is on the same page and understands the desired outcome of these consultation efforts. To provide incentive for everyone to attend the WUTC should call for and host the meeting. If possible this meeting should happen soon enough that draft material from Objective 1, Task 1 can be shared and adapted as necessary. Basic findings from this project's surveys and focus groups should be shared so everyone understands the beliefs, barriers, and needs of local government.

Task 2 – Develop an easy system for pipeline company contacts and program implementers to share information, questions, concerns, successes and challenges as the program moves forward. The method could be something like an email listserv, but the group at the Task 1 meeting will determine that. This information exchange will also serve as a feedback loop to the program implementation team so the program can be adapted if necessary.

Task 3 – Provide a designated member of the implementation team to facilitate and encourage this ongoing communication.

Obtaining Commitment –

- At the Task 1 meeting seek a commitment from each pipeline company representative, the WUTC representative, and the government associations representatives to get a letter of support from their respective company or agency that can be distributed to local governments where they operate to demonstrate their support for the consultation concept and ongoing commitment to making it work smoothly.
- At the Task 1 meeting seek a pledge from each participant to share communication information, successes and challenges as the program implementation unfolds.

Objective 3 – Provide a system for the ongoing education and materials necessary for local government planning and permitting staff in jurisdictions that have adopted consultation zones to clearly understand the purpose of consultation zones and to implement them with as little burden as possible.

Task 1 – Develop a mechanism to track jurisdictions that have adopted consultation zones and key contacts within those jurisdictions to ensure ongoing support for the smooth implementation of the programs.

Task 2 – Make available through the key contacts in each jurisdiction the educational and support materials from Objective 1.

Task 3 – Once ten communities have at least introduced consultation zone ordinances hold a one day meeting (travel support provided) of the point-of contact staff in each jurisdiction along with the program implementers and pipeline company consultation contacts to make sure everyone understands the theory of the consultation zone concept, the differences that may have occurred in the way individual jurisdictions have adopted the concept, and discuss what materials and support the jurisdictions need for ongoing implementation. This meeting will also serve as a feedback loop to the program implementation team so the program can be adapted if necessary.

Materials and support may include:

- Handouts or checklists for those seeking permits
- Educational materials for planning/permitting staff
- Checklists for planning/permitting staff for differing situations
- Customized pipeline company contact sheets and places to obtain more information

Task 4 – Develop and deliver materials agreed upon in Task 3.

Obtaining Commitment – Get the initial contacts within each adopting jurisdiction to provide a designated ongoing staff point-of-contact person who will serve as the liaison between the program implementation team and jurisdictional planning/permitting staff to ensure distribution of support materials and serve as a local educational/information source.

EVALUATION PLAN

PROGRAM LOGIC MODEL

Washington State Consultation Zone Ordinance Adoption Logic Model

Goal: To protect lives, property and pipelines through advanced planning near pipelines

Inputs/Assets/Resources	Activities	Outputs (tangible products)	Outcomes
<ul style="list-style-type: none"> ■ Remaining grant funds ■ PIPA Report ■ Existing website ■ PST Staff ■ Planners and elected officials in communities with existing Consultation Zone Ordinances 	<p>City and County Government:</p> <ul style="list-style-type: none"> ■ Develop educational materials ■ Provide implementation grants ■ Present at conferences and meetings where audience members gather (see <i>Channels and Placement</i> above). ■ Draft Op Ed or Letters to the Editor for local papers ■ Customized presentations in interested communities ■ Obtain pledges at presentations and meetings (see <i>Implementation Plan</i> sections on “Obtaining Commitment”) <p>Pipeline Safety Stakeholders</p> <ul style="list-style-type: none"> ■ Hold face-to-face meetings with pipeline company consultation contacts annually ■ Develop a forum for stakeholders and implementers to dialogue and provide ongoing facilitation ■ Obtain commitments <p>Quality Assurance</p> <ul style="list-style-type: none"> ■ Provide ongoing support and education for planning staff who have implemented CZs ■ Track adoption and contact information ■ Hold one-day meeting for all adoptees to standardize understanding, provide support and identify additional education & implementation needs ■ Obtain commitments 	<ul style="list-style-type: none"> ■ Sample ordinances ■ Potential impact radius description ■ Presentation describing CZs and implementation process ■ List of pipeline company consultation contacts ■ Website ■ Handouts ■ Checklists ■ Contact lists for communities 	<p>Short term</p> <ul style="list-style-type: none"> ■ Communities adopt consultation zone ordinances (Target=10 in the first 12 months) <p>Mid term</p> <ul style="list-style-type: none"> ■ Projects near pipelines are planned with care to consider safety of property, people and the pipeline ■ Projects are executed using best practices to protect property, people and pipelines <p>Long term</p> <ul style="list-style-type: none"> ■ Reduced incidents of pipeline damage ■ When incidents occur, damage to property, people and pipelines are minimized.

PILOT PROJECT RESEARCH DESIGN

The purpose of the evaluation is to track the implementation and outcomes of the implementation plan. To do so, the Pipeline Safety Trust will need to record resource use, activities, outputs and outcomes as described in the Logic Model above.

Performance measures

The following items should be tracked to provide sufficient data to assess the effectiveness of program implementation, as well as results.

Resources

- # of hours of PST staff devoted to activities
- \$ identified for grant funding to cities and counties for implementation

Activities

City and County Government:

- Total Grant money awarded
- Total number of grantees receiving awards
- # of conferences and meetings at which Consultation Zones are presented, and which ones
- # of Op Ed or Letters to the Editor published and where
- # of customized presentations in interested communities and where
- Record of verbal commitments obtained

Pipeline Safety Stakeholders

- Record of annual face-to-face meetings with pipeline company including roster of attendees and their affiliations
- Records of forum for stakeholders and implementers to dialogue and provide ongoing facilitation – format to be determined
- # of letters of support obtained
- Record of pledges obtained

Quality Assurance

- # of community planning departments that report receiving *excellent* support from PST personnel post implementation
- # of community planning departments that report their ongoing education needs are *completely met*
- Record of community adoption and contact information
- # of attendees at one-day meeting
- # of attendees at one-day meeting reporting significant learning, high satisfaction, and propensity to recommend attending to other communities adopting Consultation Zones.
- # of commitments obtained

Outputs

- Evidence of all outputs described:
 - Sample ordinances
 - Potential impact radius description
 - Presentation describing CZs and implementation process
 - List of pipeline company consultation contacts
 - Website
 - Handouts
 - Checklists
 - Contact lists for communities

Outcomes

Short term

- # of communities adopting consultation zone ordinances in first 12 months

Mid term

- # of projects in communities with consultation zones that were planned with consideration of safety of property, people and the pipeline
- # of projects in communities *without* consultation zones that were planned with consideration of safety of property, people and the pipeline
- Evaluation of practices used in execution of projects

Long term

- # of incidents in communities with consultation zones
- # of incidents in communities without consultation zones
- Cost of damages over 10 years in communities with consultation zones where incidents occurred
- Cost of damages over 10 years in communities without consultation zones where incidents occurred

Research methods

Most of the elements for the pilot program can be assessed through careful design and management of administrative records. Exceptions include quality assurance, which will require the development of a feedback mechanism – either web based or pen and paper provided at the close of the events. These feedback forms should be sent and received by an impartial third party to encourage candor and protect the identity of the respondents.

Formative assessment of the effectiveness of the program's activities should include periodic feedback from stakeholders via surveys at the point of contact (e.g. feedback forms at the end of meetings) or more informal discussions. It is very important to intentionally ask for input, rather than wait to see if any is offered.

Outcomes are the most cumbersome program elements to assess, and also the most important if we are to know if the program is effective.

Short term outcomes for this program are the easiest to assess. A survey of Washington State city and county Planning Directors should indicate whether a community has adopted a consultation zone ordinance, their familiarity with such ordinances and the sources of their knowledge (an assessment of the effectiveness of the activities). This survey can be conducted via web-based tools with follow up by phone to non-respondents to assure a high response rate.

Mid-term outcomes will be more challenging to assess and will require the enrollment of experts in reviewing processes used in planning projects across the state. Reviewers should first review best practices in planning and develop criteria for assessing plans. Generally a three-level scheme is sufficient describing low, moderate and high levels of best practice use, though if feasible, four or five levels may help differentiate more interesting outcomes.

Sampling from among the communities with a consultation zone ordinance (five would be optimal), reviewers can identify how projects planned near pipelines were managed and executed. The number of plans reviewed will depend somewhat on how many plans were proposed near pipelines, but ideally two to four projects would be reviewed in each community.

Reviewers should identify matching communities without an ordinance (matched based on geography, demography and pipeline-related characteristics), and review a similar number of projects. Both quantitative (number of projects that meet muster) and qualitative outcomes should be described (how the projects used or failed to use best practices). This review should include some kind of compensation for planning staff members' time and participation to be sure accurate information is being assessed.

Given the rare nature of pipeline related incidents, evidence of long-term outcomes will be particularly hard to come by. When coupled with the even more rare probability that they will be associated with a community that has a consultation zone ordinance (simply because there are few) these outcomes are truly challenging to come by. However, anytime there is an incident, its consequences and location are generally well tracked by the PST and others. A review and comparison of incidents over a very long period of time may lead to adequate evidence of the program's ultimate effectiveness, though logic would suggest that if mid-term outcomes occur, the long-term outcomes are likely to occur as well.

Timeline & budget

Short-term and mid-term outcomes research should follow the following approximate timelines:

Research Activity	Start & End Dates	Budget estimate
Statewide survey of planners (web-based with phone follow up)	Design survey, obtain contact information (month 12) Field survey (month 13) Report on survey (month 14)	\$5,000
Review of projects	Identify reviewers, recruit control and experimental communities (month 12) Conduct reviews (month 12-15) Report on findings (month 16-17)	\$20,000-30,000*

* depends on remuneration provided to participating communities